

Grand Drive Stormwater Outfall

Bigfork Stormwater Project

Talking Points

TSEP Application

The Issues:

- Increased urban development in Bigfork Village is resulting in a significant increase in stormwater runoff in the area. Facilities are needed to address stormwater conveyance and filtration.
- Minor flooding has occurred in Bigfork as a result of increased stormwater and insufficient pipe capacities.
- Stormwater from two large storm events have taxed the Bigfork Sewer Treatment Plant to a point where untreated water has been discharged.
- Flathead Lake is a listed A-1 waterbody and is on the 303 (d) list of impaired waters in Montana. The lake is a crown jewel for Flathead County and the state of Montana.
- Flathead Lake has been identified as not fully supporting aquatic life as a result of nitrogen, phosphorus, total suspended solids and siltation.
- A 1996 study by the Flathead Lake Biological Station found e. coli bacteria, total suspended solids, total
 phosphorus and zinc levels to exceed state benchmarks at a popular swimming area in Bigfork Bay, located
 near two stormwater outfalls, raising public health concerns.
- Pollution from the discharges, if not addressed, will continue to degrade water quality in Flathead Lake and pose human health problems.

Identifying Solutions:

- A PER has been prepared to evaluate stormwater system deficiencies. Project funding support for the PER has been provided by a DEQ 319 Grant and a DNRC Planning Grant.
- Phase One-Grand Drive Improvements remain the top priority. Upgrades include installation of DEQ minimum standard conveyance pipes and the installation of hydrodynamic filtration to treat stormwater runoff prior to discharge into Bigfork Bay.
- The Bigfork Stormwater Project Sample and Analysis Plan has been designed to be consistent with current TMDL protocols so that data can be used to assist the state in pollutant load determinations.
- The Bigfork Stormwater Advisory Committee is working to involve the local community in the project, by developing collaborative partnerships and initiating education and outreach efforts. This effort will ensure thorough, long-term solutions to the stormwater infrastructure needs in Bigfork.

The Outcome:

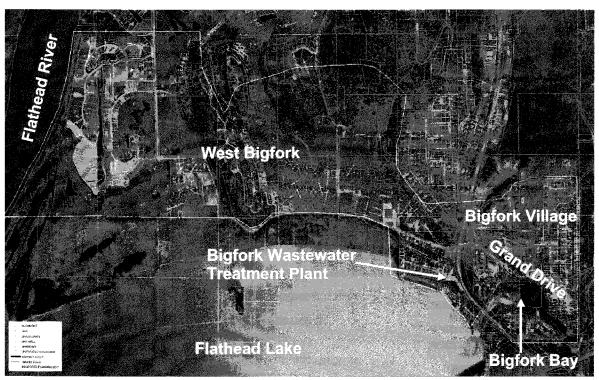
- The Bigfork Stormwater Project will reduce nutrients and pollutants to Bigfork Bay along with excess conveyance volumes delivered to the Bigfork Wastewater Treatment Facility during large storm events.
- Flooding issues related to the stormwater system in Bigfork will be resolved.
- Stormwater system improvements will help meet state and federal standards for water quality for Flathead Lake and public health issues will be resolved.
- **A Model Project:** The Bigfork Stormwater Project is a pilot stormwater infrastructure project for other small un-incorporated towns of Flathead County that have similar stormwater issues.



Bigfork Stormwater Project Area

The unincorporated community of Bigfork is located on the northeast corner of Flathead Lake at the mouth of the Swan River

Phase 1 project implementation will concentrate on Grand Drive Improvements.





What we want to avoid!

Sediments and nutrients contribute to an algal bloom in Bigfork Bay near a stormwater outfall

Progress!

Partner Project with the Bigfork School District-

Installation of a
StormTech Stormwater
Detention System at the
Bigfork High School
which will reduce the
stormwater volume
conveyed to Grand
Avenue.

